



DiaLog™ Scout PLC12/24

Automatic Dialing Alarm System Specifications

The monitoring/alarm system shall be microprocessor based and have the capability to monitor 12 or 24 PLC registers via a Modbus serial connection. The system shall perform as a Modbus Master reading the user-specified registers in the PLC and assigning them to points. Each of these points shall be user-configured through the front panel as reading coils, input status or holding registers. The points shall be compared to limit conditions and if outside the conditions, but into an alarm. In addition, the monitoring/alarm system shall monitor the communication link, AC power and battery voltage continuously. Upon detecting an alarm on any of its inputs, a low battery condition or detecting loss of its AC power, the system shall begin dialing the first of up to 8 user-programmed telephone numbers.

The monitoring/alarm system shall speak user-recorded messages to the called party describing its location and the alarm conditions that are present. The monitoring/alarm system shall then verbally request that an acknowledgment be given. The called party shall acknowledge the call by momentarily depressing the '9' key on their telephone keypad.

If the system is not acknowledged during the call, it shall hang up, wait from 1 to 3600 seconds and then dial the next number in its phone list. If a successful acknowledgment occurs, the system shall give a sign-off message, allow access to program the system and hang up and then wait a user-programmed period of time for the alarm conditions to be corrected. If this period of time elapses and the alarm condition(s) still exist, the system shall begin the alarm notification cycle again.

Options shall include adding 8 digital and 4 analog inputs.

1.0 PHYSICAL CHARACTERISTICS

- A. **Enclosure:** Minimum rating shall be NEMA 12, flush mount or sub-panel mount.
- B. **Environmental Limits:** Temperature: 32 to 158°F (0 to 70°C) Humidity: 0-90% non-condensing @ 104°F
- C. **Power Supply:** 115 VAC 10%, 60 Hz; 5 watts, UL rated power supply included
- D. **Dimensions:** Front panel: 9.34"W x 7.22"H Enclosure: 8.2"W x 5.2"H x 3.6"D
- E. **Weight:** 2.1 lbs. (.93kg)
- F. **Electrical Protection:** Solid state surge protection provided on digital input, analog input, serial port, and telephone circuitry. All fuses shall be solid-state automatic resettable requiring no maintenance.
- G. **Field Wiring:** All I/O wiring shall use quick-disconnect pluggable connectors.
- H. **Communication:** RS-232 or RS-485

2.0 PERFORMANCE SPECIFICATIONS

- A. **Telephone Numbers:** 8 numbers up to 25 digits each. Numbers may include '*', '#', delays and dial tone detection.
- B. **Recorded Speech:** 5 seconds per input channel message and System Identification message
- C. **Monitoring Capacity:** Either 12 or 24 PLC registers.
System shall read: holding registers, digital input and status registers
System shall read/write: coils
- D. **Speech Technology:** Digitally recorded voice messages plus permanent library.
- E. **Message Requirements:** Alarm message for power failure, low battery and individual 5-second user recorded messages for each input channel and a single 5-second user-recorded message for the system identification.

- F. **Local Programming:** The system shall be programmable from the front integral keypad with programming prompts displayed on the integral LCD display.
- G. **Remote Programming:** The system shall be remotely programmable from a phone call-in. The user shall be able to program the telephone numbers, change the channel mode between Call on Alarm and Status Only.
- H. **Types of Alarms:** The monitoring/alarm system shall have the following separate alarm types:
- System – loss of primary power and low battery, loss of Modbus communication to the PLC
 - Digital – on or off for a specified period of time
 - Analog – a user-specified high or low limit for a specified period of time
- All alarms shall be recorded with date/time in the event log.
- I. **Alarm Acknowledgment:** The system shall provide acknowledgement of alarms from:
- the front panel,
 - a phone that is called with an alarm condition,
 - a dial-in from a remote location with appropriate access codes.
- All acknowledgements will be recorded in the event log with the date/time of the acknowledgement, the method of acknowledgement.
- J. **Status Reporting:** A report of all current conditions of the system shall be available when the system is called. The report shall include the name of the unit and current state of all channels.
- K. **Event Reporting:** The system shall have the capability of documenting all alarms, dial-out, dial-in, and alarm acknowledgement, and relay activations. The event report shall contain the last 100 events. Each event shall have the date/time of the event and the action performed.
- L. **Channel Mode:** Each channel shall be individually programmed for alarm notification or status only.
- M. **Alarm Notification:** The system shall be capable of notifying of alarm conditions to a phone or digital pager.
- N. **Arming and Disarming:** The system shall be capable of being armed or disarmed manually. Arming or disarming shall be recorded to the event log.
- O. **Listen In:** Integral microphone shall allow user to listen in to the remote site during call-in.
- P. **Battery Backup:** The system shall have internal battery back-up capacity sufficient for an 8-channel monitoring/alarm system to perform its alarm call-out function for a minimum of 12 consecutive hours upon loss of primary power.
- Q. **Certifications:** The monitoring/alarm system shall meet FCC Part 15, Class A and shall have valid FCC registration number per Part 68.
- R. **Manufacturer:** Automatic dialing monitor/alarm system shall be DiaLog Scout as manufactured by Antx, Inc., Austin, TX.
- S. **Warranty:** One year of warranty shall be standard with the purchase of a new unit.